Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Review of Part 87 of the Commission's Rules	)	WT Docket No. 01-289
Concerning the Aviation Radio Service	)	

Comments on Further Notice of
Proposed Rulemaking

Aeronautical Radio, Inc. (ARINC), by its attorneys, hereby responds to the Commission's Further Notice of Proposed Rulemaking in this proceeding. ARINC has participated actively in this proceeding and will continue to do to assist the Commission to bring Part 87 up to date to meet the evolving needs of the United States airspace users. The Commission in its Further Notice of Proposed Rulemaking raises questions as to satellite matters, frequency issues, station identifications, and SCATANA In addition, ARINC requests the Commission act in this rulemaking to authorize the use of 8.33 kHz channel spacing in the aeronautical enroute band.

Satellite Matters

The Commission has raised a number of issues as to the treatment of satellite communications for aviation. At the outset, the Commission refers to the VHF AMS(R)S allocations. We assume that the reference should be to the UHF and SHF allocations for AMS(R)S, but to the extent that the use of the VHF AM(R)S allocation for satellite communications is under consideration, ARINC submits that the band is currently too crowded for such use and opposes such operations. The Commission should consider whether to propose to a future competent World Radio Conference the deletion of footnote 5.198 from the

International Telecommunication Union (ITU) Table of Frequency Allocations, which permits limited use of the VHF AM(R)S band for AMS(R)S communications.

The Commission also asks whether the technical requirements of Part 87 should be amended to reflect the use of non-geostationary satellite networks and other systems beyond the Inmarsat system. ARINC supports the addition of the technical standards and aircraft station licensing provisions to Part 87 for the satellite bands 1610-1626.5 MHz, 2000-2020 MHz, and 5000-5100 MHz as they may be adopted by RTCA, ICAO, and AEEC. If a system is to be used for AMS(R)S for safety communications in international flight, it must be licensed to the aircraft operator, not to the system operator. Article 29 to the Convention on International Civil Aviation (the "Chicago Convention")[1] requires every aircraft in international flight to carry a radio license for all radio apparatus installed on the aircraft. Operation of U.S. registered aircraft outside domestic airspace without an aircraft radio license covering all radios would run afoul of this treaty obligation.

Moreover, the availability of satellite communications in foreign airspace may also depend upon the AMS(R)S aircraft station being authorized under the aircraft radio license issued to the aircraft operator. Article 30 of the Chicago Convention provides that aircraft stations licensed by their country of origin may operate in any of the countries belonging to ICAO. Operating under the Memorandum of Understanding for Global Mobile Personal Communication by Satellite (GMPCS) does not provide the aircraft operator with sufficient protection for the critical safety services to be rendered by a satellite system. Service from a GMPCS earth terminal is subject to interruption depending upon the status of the service

[1] 61 Stat. 1189, TIAS 1591 (1944).

provider's licensing in each country that the aircraft over flies[2]. Such interruption of service can come without warning and require costly rerouting of aircraft or result in the seizure of the radio in the aircraft. Federal aviation regulations require that United States air carriers have air-ground communications throughout their routes even when those are in foreign countries (14 CFR § 121.99). Accordingly, it is the aircraft operator that is responsible for insuring that he has facilities for safety communications at all times, something that should not be left to the vagaries of foreign regulation of telecommunications companies, wholly outside the control of the aircraft operator.

Frequency Issues

Civil Air Patrol Frequencies. The FCC proposes to remove the frequencies formerly designated for the civil air patrol from Section 87.173(b) of the Rules. ARINC agrees with the release of the VHF CAP channels, but ARINC has recently had inquiries about channels in the 25-26 MHz region in support of HF datalink. The 4 MHz and 26 MHz channels formerly used by the CAP are allocated internationally to Fixed and Mobile (other than Aeronautical Mobile) and would not be available for regular aeronautical mobile applications. Nonetheless, ARINC believes that the Commission should continue to reserve the three 26 MHz CAP channels and explore the reallocation of these frequencies to the Aeronautical Mobile Service.

Ku-Band Radionavigation. The Commission has also proposed to remove 14.0-14.4 GHz from 87.187(b) of the Rules and the allocation for radionavigation in the 14.0-14.2 GHz band

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[2] In the Second Report and Order, on *Global Mobile Personal Communications by Satellite*, 18 FCC Rcd 24423 (2003), the Commission emphasized that any GMPCS mobile earth terminal operating in the United States must be covered by an FCC-issued blanket authorization to a service provider who must be responsible for the control and operator of the Station (¶¶ 84-91).

from the Table of Frequency Allocations (Section 2.106 of the Commission's Rules). We concur that aviation has no present need for these frequencies for radionavigation.

HF listings. The FAA has suggested that the listing of frequencies for HF communications shown in Section 87.173(b) of the Rules be compacted to band segments and that the HF listings of frequencies in 87.263(d) of the Rules be replaced with a cross reference to Appendix 27 to the Chicago Convention. ARINC agrees with the FAA that section 87.173(b) should reflect only the band segments and not the individual frequencies. However, ARINC urges the Commission to leave the individual frequencies and regions in Section 87.263(d) of the Rules because Part 87 is more readily available to pilots than Appendix 27. It is important that the pilots know which are the appropriate frequencies to use to communicate with ground stations when flying the major world aviation route areas (MWARA) as listed in Section 87.263(d) of the Rules. This question was previously considered by the Commission in 1981, and the Commission agreed that the continued listing of these frequencies in Part 87 would provide a "considerable convenience for the public."[3]

Ground control use of ATC channels. ARINC supports FCC's proposal that the FAA be permitted to use the use of all bands listed in section 87.421 for air traffic control communications specifically including ground control communications. There is increasing congestion on the ground at airports and additional flexibility in assigning ground control communication facilities would be beneficial.

136.50 MHz. One final frequency matter is the use of 136.50 MHz. In 2001, the FCC set aside four frequencies for the establishment of a Flight Information Services Broadcast (FIS-B)

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[3] Amendment of Part 87, 87 FCC 2d 382 (1981) ¶ 36.

system at the request of the Federal Aviation Administration.[4] The FAA designated 136.425, 136.450 and 136.475 MHz for the use by the FIS-B system, and ARINC agreed to make 136.5 MHz available. The FAA awarded contracts to two entities, but only one has moved forward with the program. Consequently, the frequencies 136.475 and 136.50 MHz are no longer needed for the FIS-B. Accordingly, the Commission should amend Section 87.187(dd) of the Rules to delete reference to 136.50 MHz.

Station Identification Matters

ARINC agrees that a new station identification format should be available for use by maintenance personnel when operating aircraft within an airport. We agree that the proposed identification of the name of the owner or operator of the aircraft followed by the word "maintenance" with whatever additional alphanumeric characters may be required to avoid confusion should be sufficient. Similarly, ARINC agrees that ultra light aircraft could be identified using "N" numbers assigned to the aircraft. However, it is important that ultra light aircraft operating radios use some form of station identification. Ultra light aircraft do not operate on regular schedules or in and out of identifiable airports, and as a result, they are harder to track down should they be the source of interference. Thus, some form of station identification is essential.

SCATANA

The Commission has responsibly asked whether modifications are required to its Rules regarding the Executive Branch's Plan for the Security Control of Air Traffic and Air Navigation Aids (SCATANA). We have learned much in the past three years about responding to

[4] Amendment of Parts 2 and 87 to Accommodate Advanced Digital Communications, 16 FCC Rcd 8228 (2001).

emergencies, but the nation's system of aeronautical communications and navigations system worked extremely well on September 11, 2001. The current FCC Rules seem to provide sufficient flexibility to meet future emergencies, and ARINC has no suggestions for revision.

Use of 8.33 kHz Channels in the Aeronautical Enroute Service

Air traffic is returning to pre-September 11 levels. The communications resources for aeronautical enroute communications are being stretched, and the frequencies will soon be exhausted. In the meantime, a number of aircraft operating in the United States are being equipped with 8.33 kHz-capable radios for use in the upper space in Europe. ARINC submits that a judicious introduction of 8.33 kHz channeling into the United States airspace for the aeronautical enroute service only would provide essential relief to the problems of operating in the aeronautical enroute service in the United States.

Aviation is an international service. Aircraft must be able to operate and communicate anywhere in the world. Europe has concluded that the next logical step in frequency-splitting is the implementation of 8.33 kHz and has mandated its use by air carriers operating in Europe. The FCC has recognized the need for 8.33 kHz-capable radios by authorizing certification of such radios in the Report and Order in this proceeding, but still bars their use in the United States. A reasonable transition to 8.33 kHz-spaced channels, implemented with a concurrence of the industry through the Aeronautical Frequency Committee, together with the transition of data communications to VDL Mode 2 will provide significant increases in the capacity of the current communication system.

This is not to say that it would be easy to implement such a transition. The principal users of the United States airspace, the air carriers, are currently in such financial difficulties that

makes it unlikely that they would be able to commit the capital necessary to retrofit existing air craft for sometime to come. However, new aircraft are being acquired and the new aircraft are currently coming in with 8.33 kHz and VDL Mode 2 radios. The transition will be slow, the transition will require coordination of ground facilities, and the transition must be selective. However, the FCC should adopt rules now to permit civil aviation to begin the transition in the aeronautical enroute services where the effects of the program can be carefully controlled and evaluated.

Respectfully submitted,

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July 12, 2004